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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,807	03/30/2004	David P. Piccirillo	10577-143	6024

7590 06/20/2007  
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Chicago, IL 60610

EXAMINER
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SNIDER, THERESA T

ART UNIT	PAPER NUMBER
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1744

MAIL DATE	DELIVERY MODE
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06/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/812,807	<b>Applicant(s)</b> PICCIRILLO ET AL.	
	<b>Examiner</b> /Theresa T. Snider/	<b>Art Unit</b> 1744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/30/2004, 6/30/2005</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 86(figure 2).

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 138(0020).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 recites a step that has already been recited in claim 12.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 10, line 2, 'the carriage pinion shaft center line' lacks proper antecedent basis.

Claim 11, line 2, it is unclear as to what is meant by a 'forward state', a 'reverse state' and 'rest state'.

Claim 12, line 5, 'the limit switch' lacks proper antecedent basis.

Claim 13, line 2, it is unclear whether 'a second switch control' is in addition to that of claim 12, line 9 or one in the same.

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Claim 16, line 2, it is unclear as to what is meant by 'a forward state';

'the controller' lacks proper antecedent basis.

Claim 17, line 2, it is unclear as to what is meant by 'a rest state';

'the controller' lacks proper antecedent basis.

Claim 18, line 2, it is unclear as to what is meant by 'a reverse state';

'the controller' lacks proper antecedent basis.

Claim 19, line 2, it is unclear as to what is meant by 'a rest state';

it is unclear whether 'a second switch control' is in addition to that of claim 12, line 9 or one in the same.

Claim 20, line 2, it is unclear as to what is meant by 'a reverse state';

Line 3, it is unclear whether 'a first switch control' is in addition to that of claim 12, line 5 or one in the same.

Claim 21, line 2, it is unclear as to what is meant by 'a forward state';

it is unclear whether 'a second switch control' is in addition to that of claim 12, line 9 or one in the same.

Claim 22, line 2, it is unclear whether 'a first switch control' is in addition to that of claim 12, line 5 or one in the same.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-6 and 9-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wall(5,836,268).

Wall discloses a moveable carriage supported by a frame, a lance tube movable with the carriage and a motor for driving the carriage (fig. 1, #10, fig. 2, #110,115,110c).

Wall discloses a limit switch mounted on the carriage (fig. 2, #110,130,135).

Wall discloses a first switch control device positioned such that the switch will sense it when the lance tube is in the extended position (fig. 2, #140, col. 3, line 33).

Wall discloses a second switch control device positioned such that the switch will sense it when the carriage is in the retracted position (fig. 2, #140, col. 3, line 53).

Wall discloses a controller electrically coupled to the limit switch (col. 5, lines 48-51).

With respect to claim 3, Wall discloses the first switch control device mounted to the frame (fig. 2, #140).

With respect to claim 4, Wall discloses the second switch control device mounted to the frame (fig. 2, #145).

With respect to claim 5, Wall discloses the first switch control device is adjustable (col. 6, lines 45-50).

With respect to claim 6, Wall discloses the second switch control device is adjustable (col. 6, lines 64-67).

With respect to claim 9, Wall discloses the limit switch is mounted inside the frame (fig. 2, #130,135).

With respect to claim 10, Wall discloses the limit switch mounted to the carriage pinion shaft center line (fig. 2, #130,135).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 2 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wall(5,836,268).

Wall discloses a similar soot blower however fails to disclose the type of switch and control device.

It would have been obvious to one of ordinary skill in the art to determine the most appropriate type of limit switch to use in Wall to allow for the most effective position determination.

With respect to claims 7-8, it would have been obvious to one of ordinary skill in the art to determine the most appropriate control devices to use on wall to allow for the most effective operation with the switch.

12. Claims 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wall(5,836,268) in view of Lee, Jr. et al.(3,794,051).

Wall discloses a similar method however fails to disclose a cleaning medium.

Wall discloses a lance tube and carriage (fig. 2, #115,110).

Wall discloses initiating forward travel of the carriage thereby extending the tube (col. 6, lines 19-21, fig. 2, unnumbered double arrow).

Wall discloses sensing the limit switch is proximate a first switch control device (fig. 2, #140, col. 3, line 33).

Lee, Jr. et al. discloses a soot blower that disperses cleaning medium from a lance tube (col. 6, lines 44-50). It would have been obvious to one of ordinary skill in the art to



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provide the dispersing of cleaning fluid of Lee, Jr. et al. in Wall to allow for the most effective cleaning of the tubes.

Wall discloses reversing the direction of travel of the carriage thereby retracting the tube (col. 6, lines 41-44, col. 6, lines 19-21).

Wall discloses sensing the limit switch is proximate a second switch control device (fig. 2, #140, col. 3, line 53).

With respect to claim 22, Wall discloses reversing the direction of travel of the carriage after sensing the first switch control device (col. 6, lines 39-44).

***Allowable Subject Matter***

13. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 13-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Double Patenting***

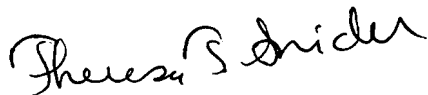
15. Claim 14 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 13. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Theresa T. Snider/ whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Theresa T. Snider/  
Primary Examiner  
Art Unit 1744

6/16/07